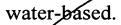
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## WHAT IS CLAIMED IS

- 1. A method of utilizing ribonucleic acid as markers for product anti-counterfeit labeling and verification. The said method is to preserve ribonucleic acid in a medium and label the said medium onto or into objects for authenticity. The said medium can also be mixed directly with liquid or solid for labeling. For authenticity check, a recovery method with solvent and subsequent PCR amplification method is used to check the composition of the ribonucleic acid.
- 2. The method of claim 1 wherein said ribonucleic acid can be ribonucleic acid (RNA) or deoxyribonucleic acid (DNA).
  - 3. The method of claim 1 wherein said ribonucleic acid can be animal, plant, bacterial, fungus, or virus origin or synthesized vector or fragments.
  - 4. The method of claim 1 wherein said medium refers to materials inert and not deterious to the objects being labeled.
  - 5. The method of claim 1 wherein said medium refers to polymers which are miscible with ribonucleic acid.
  - 6. The method of claim 5 wherein said polymer can be acrylic or plastics.
    - 7. The method of claim 1 wherein said liquid or solid can be ink, glue, or polymers.
  - 8. The method of claim 7 wherein said liquid can be oil-based or water-based.
- 9. The method of claim 7 wherein said glue can be oil-based or



- 10. The method of claim 7 wherein said polymers can be acrylic or plastics.
- 11. The method of claim 1 wherein said recovery method refers to utilizing organic or inorganic solvent for extraction.
- 12. The method of claim 11 wherein said organic solvent can be buffer, benzene, characin, alcohol, acetone, or chloroform.
- 13. The method of claim 11 wherein said inorganic solvent can be water.
- 14. The method of claim 2 wherein said buffer can be phosphate-based buffer.
  - 15. The method of claim 1 wherein said PCR method can be single or multiple nested PCR.

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